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APPLICATION NO.	ON NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/658,522 09/08/2003		09/08/2003	Raymond Bertholet	88265-6925 1947		
29157	7590	02/02/2006		EXAMINER		
BELL, BOY	/D & LI	OYD LLC	SILVERMAN, ERIC E			
P. O. BOX 1	135					
CHICAGO,	IL 6069	0-1135	ART UNIT	PAPER NUMBER		

1615

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	tion No. Applicant(s)							
	Office Action Commence	10/658,52	22	BERTHOLET ET AL.						
	Office Action Summary	Examiner		Art Unit						
		Eric E. Sil	verman, PhD	1615						
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).										
Status										
1)	Responsive to communication(s) filed	on								
2a)□	This action is FINAL . 2b)⊠ This action is n	on-final.							
3)□	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is									
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.									
Dispositi	on of Claims									
4)🖂	Claim(s) 1-19 is/are pending in the ap	plication.								
	4a) Of the above claim(s) is/are withdrawn from consideration.									
5)	5) Claim(s) is/are allowed.									
6)⊠	6)⊠ Claim(s) <u>1-19</u> is/are rejected.									
7)	7) Claim(s) is/are objected to.									
8)□	Claim(s) are subject to restriction	on and/or election r	equirement.							
Applicati	on Papers									
9)☐ The specification is objected to by the Examiner.										
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.										
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.										
Priority ι	ınder 35 U.S.C. § 119									
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:										
	1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No									
	3. Copies of the certified copies of the priority documents have been received in this National Stage									
application from the International Bureau (PCT Rule 17.2(a)).										
* See the attached detailed Office action for a list of the certified copies not received.										
Attachmen	t(s)									
1) Notic	e of References Cited (PTO-892)	(PTO-413)								
	e of Draftsperson's Patent Drawing Review (PT		Paper No(s)/Mail Da		O-152)					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) 6) Other:										

DETAILED ACTION

Receipt of Amendment and remarks filed therewith, filed 1/05/2006 is acknowledged. Claims 1-19 are pending in this action.

Response to Arguments

Applicant's arguments with respect to the rejection of claims 1 – 19 under 35 U.S.C. 102(b) and 35 U.S.C. 103(a) have been considered but are moot in view of the new ground(s) of rejection detailed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. **This is a written description rejection**.

Claim 1 recites "obtained from the culture of a microorganism." The specification does not describe how to obtain the claimed product from the culture of a microorganism, or what microorganism could be used to obtain the biomass. In fact, all of the examples merely recite "a biomass", which generic to biomasses obtained from cultures of microorganisms and other biomasses.

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Claims 2 – 6 and 17 – 19 are rejected for depending on claim 1, while not rectifying the inadequate description thereof.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

In light of amendment, the rejection of claims 10, 12 and 13 under the second paragraph of 35 U.S.C. 112 is withdrawn.

Claims 7 – 16, 18 and 19 **remain** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for reasons of record.

Response to Arguments

Applicants arguments have been fully considered, but are not persuasive.

Regardless of what applicant may intend by the limitation "without purification", the steps recited in instant claims, such as centerfugation, distillation, and deodorizing are purification steps, since they separate unwanted materials from desired materials.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 - 3, 5 - 7, 9, 12, 13, 14 - 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermann et al. US 6,177,580, in combination with Barclay, EP 0726321, of record.

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Timmermann teaches the synthetic triglycerols and methods of manufacture thereof (abstract). The triglycerols are manufactured by transesterification of faty acid glycerides, such as fish oil, with edible oils, such as palm kernel or coco (col. 3, line 49 – col. 4, line 21). The process is carried out under inert gas, and in high yield (col. 2, lines 46 - 64). High yield is deemed to be a teaching of more than 60%, as required by instant claim 1No phospholipids are reported in the product, so such are deemed absent. No LC-PUFAs are reported in the product, so such are also deemed absent. Also, the steps of distillation and filtering are taught (Examples 1 - 3). compounds, especially in infant diets (page 2, lines 10 - 21).

Timmermann does not teach using microorganisms.

Barclay teaches that PUFA's in general and arachadonic acid in specific are important dietary. Barclay also teaches that while arachadonic acid can be obtained from fish oils, it is present in a low concentration there, and thus it is preferably to use microorganisms (page 2, lines 28 – 50).

Accordingly, it would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to apply the product and method of Timmermann to microorganisms, as taught by Barclay. The motivation to do this comes from Barclay, who teaches that certain oils deemed useful by Timmermann, such as fish oils, have a lower concentration of beneficial oil than do microorganisms. Accordingly the artisan would enjoy a reasonable expectation of success.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermann et al. US 6,177,580, in combination with Barclay, EP 0726321, of record

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as applied to claims 1 - 3, 5 - 7, 9, 12, 13, 14 - 19 above, and further in view of Todd, of record.

The teachings of Timmermann and Barclay are discussed above.

Timmermann and Barclay do not teach grinding the biomass before contacting it with the oil.

Todd teaches grinding a plant before extraction by an edible oil to increase the bioavailability of the desired material and to avoid coarse particles in the residual solid cake (paragraph bridging col.'s 5-6).

Accordingly, a person of ordinary skill in the art would be motivated to grind the biomass, as taught by Todd, in order to increase the bioavailability and to avoid coarse particles in the solid cake. Since Todd teaches this in an extraction process, the artisan would have a reasonable expectation of success.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermann et al. US 6,177,580, in combination with Barclay, EP 0726321, of record as applied to claims 1-3, 5-7, 9, 12, 13, 14 – 19 above, and further in view of Tsujiwaki, of record.

The teachings of Timmermann and Barclay are discussed above.

Timmermann and Barclay do not teach the use of tocopherols.

Tsujiwaki teaches that PUFA's are susceptible to oxidation in air, and thus it is common in the art to add tocopherols to PUFA's as antioxidants.

Accordingly, it would be prime facie obvious to a person of ordinary skill in the art at the time of the invention to add tocopherols to the PUFA's of Timmermann and

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Barclay. The motivation is provided by Tsujiwaki, who leads the artisan to believe that the PUFA compositions will be more stable if tocopherols are added. Thus, the artisan would enjoy a reasonable expectation of success.

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is 571 272 5549. The examiner can normally be reached on Monday to Friday 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571 272 0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric E. Silverman, PhD

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Gollamudi S. Kishore, PhD Primary Examiner

LS Kirter

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